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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/823,623 | 04/14/2004 | Lennart Stridsberg | 1291-0146PUS2 | 4653 |
| 2292 | 7590 | 01/11/2006 | EXAMINER | |
| BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747 | | | RESTIFO, JEFFREY J | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3618 | |
| DATE MAILED: 01/11/2006 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/823,623 | STRIDSBURG, LENNART | |
| | Examiner | Art Unit | |
| | Jeffrey J. Restifo | 3618 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/557,902.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Acknowledgments

1. Acknowledgment is made of the amendment filed 9/26/05.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-4 and 6-14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 1 recites "a powertrain of a vehicle...comprising...a thermal engine...an energy storage...an electric motor... wherein at least part of filtered air from an air filter of the thermal engine is made to pass in such a way that at least part of the electric motor will obtain cooling from the filtered air".

Written description for the above recitation is lacking due to the following:

- A) The support for the above recitation is believed to come from the fourth paragraph of page 25 of the specification. This paragraph teaches that "engine input air", "air for the cooling of cooling oil or water", or "air for the cooling of battery cells" may be used to cool the motor.

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However, note that in some cases, such as air to cool engine oil or battery cells, that it is not apparent that this air is "filtered" from an "air filter of the thermal engine".

B) In the case of "engine input air", there is no teaching of how part of the air is "diverted" within the air filter, or "downstream" of the air filter which then enters an "engine intake", such as a fuel injector system, or carburetor and channeled to the air inlet 636 of the motor. Due to this, the Applicant did not have possession of the claimed invention of invention 1. See claims 6 and 11 for a similar rejection.

Note in contrast, that Takedomi, et al, US 2003/0226653, cited on form PTO 892 included with this Office Action, goes into much more detail as to how engine inlet air is used to cool a motor.

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-4 and 6-14 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant regard as his invention.

A) It is considered unclear how filtered engine air is made to cool the motor as set forth in claim 1 for reasons set forth in the 112 1st paragraph rejection of claim 1 see above. For these reasons little patentable weight has been given to the limitation of the air being filtered and coming from the engine.

See also claims 6 and 11 for a similar rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 6, 10, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Buschhaus et al. (US 5,713,425 A).

Buschhaus et al. discloses a conventional hybrid vehicle comprising an engine 10 with output shaft 14, electric motor 46, energy storage device 64, wherein either said engine or said motor are able to drive wheels, as shown in figure 1. The air filter is an intended use and the limitation describing the source of cooling air is not found in the spec or drawings and therefore has not been given consideration.

The method of claim 11 is inherently performed in the use of the apparatus of Buschhaus et al. recited above.

Claim Rejections - 35 USC § 103

3. Claims 2-4, 7-9, and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buschhaus et al., as applied to claims 1, 6, and 11 above, and further in view of Ishida et al. (US 5,705,865 A).

Buschhaus et al. does not disclose the rotor and stator windings of the motor as having airgaps for circulating air for cooling purposes. Ishida et al. discloses a motor for a vehicle comprising rotor and stator windings 34,32 and airgaps and channels "W" and

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30, as shown in figures 3 and 4. It would have been obvious to one having ordinary skill in the art at the time of the invention to have provided the motor of Bruschhaus et al. with the motor cooling structure of Ishida et al. in order to cool the motor and prevent overheating.

Response to Arguments

4. Applicant's arguments filed 9/26/05 have been fully considered but they are not persuasive. With respect to the applicant's arguments concerning the 112 first paragraph rejection based on inadequate written disclosure, the claimed invention appears to be relying on filtered engine air as the novel subject matter. None of the recited limitation directed towards this feature is found in the drawings or spec. If the applicant wishes to rely on this structure as patentable then it must be adequately disclosed in the spec and drawings, or else removed from the claims.

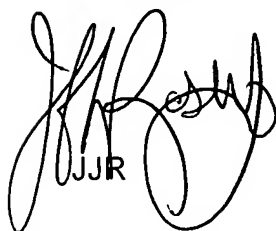
Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey J. Restifo whose telephone number is (571)272-6697. The examiner can normally be reached on M-F 10-7.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Ellis can be reached on (571) 272-6914. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to be "JJJR" with a large, stylized flourish extending from the end.